BYVSHEV, S.V., inzh.

From the results of the work of the Plenum of the Scientific Council on "Power engineering and electrification." Teploenergetika 9 no.11: 94-96 N '62. (MIRA 15:10)
(Power engineering) (Electrification)

BYVSHEV, Ya.

Improvement of the "Moskvichka" saw. Mias.ind. SSSR 33 no.3:48 '62.
(MIRA 15:7)

1. Ryazhskiy myasokombinat.
(Meat industry—Equipment and supplies) (Saws)

NIKIFOROVA, N.S.; BYVSHEVA, L.L.

Refining of kaolin in suspensions for paper coating. Bum.prom. 35 no.12:21-23 D '60. (MIRA 13:12)

1. Fabrika tekhnicheskikh bumag "Oktyabr'".
(Paper) (Kaolin)

8(3), 8(5)

AUTHOR: Byvsheva, M. M., Engineer

SOV/105-59-3-14/27

TITLE: On the Correction Factors for the Differential Equation Coefficients for a Rotary Amplifier-motor System (O popravkakh k koeffitsiyentam differentsial'nogo uravneniya sistemy elektromashinnyy usilitel' - dvigatel')

PERIODICAL: Elektrichestvo, 1959, Nr 3, pp 64 - 67 (USSR)

ABSTRACT: This is a presentation of the method and of the results of the calculation of correction factors for the differential equation describing a system consisting of a 10 kw rotary amplifier which supplies a direct current motor with independent excitation. The curves obtained theoretically and experimentally for the increase of the motor speed during starting-up are compared. A differential equation (1) describing the behaviour of the system rotary amplifier-motor is written down, the amplifier being idealized to a certain extent. Two drive systems were experimentally investigated, which differed as to the influence of internal backfeeds (mainly of the load current) upon the transient process. The first system consisted of a EMU-100 rotary amplifier and a

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PN-45 motor, the second system of the same amplifier and a PN-85 motor. At first the investigation results of the first system are presented. A comparison of the theoretically obtained curves with the experimental data showed the considerable influence of the load current. Hence corrections must be added to formula (1). The experimental curve describing the variation of motor speed takes a fluctuating course exhibiting a small number of overshoots above the stabilized value. The time constant of the control winding circuit is taken to be zero. Under this assumption the curve for the variation of motor speed can be approximated by a second order differential equation (2). The coefficients of this equation are determined by an approximative method. The experimental curve is differentiated twice by means of differentiation of the tabulated values (Ref 2). Equation (2) expresses the nature of the transient process in the system in question with sufficiently high accuracy. It is shown that the approximative curves constructed according to equation (3) almost coincide with the experimental curves. Hence the dynamic properties of the

rotary amplifier-motor are described with an accuracy sufficient for practical purposes by the second order differential equation. The corrections obtained for the coefficients of the differential equation also hold for the second variant of the system. If the corrections are taken into account, the differential equation of the system takes the form of equation (4). In the case of an undercompensation of 5 and 10% the corrections of the coefficients of the differential equation must be averaged. Even in this case theoretical and experimental curves differ only little. Hence in the establishment of the transmission function of the system rotary amplifier-motor the averaged corrections can be used. There are 4 figures, 1 table and 2 Soviet references.

SUBMITTED: August 11, 1958

GURTOVOY, G.K.; ITSIKSON, L.Ya.; BYVSHEVA, O.N.

Radiophosphorus diagnosis of ocular tumors and the ways for its improvement. Vest.oft. no.3:9-15 My-Je '62. (MIRA 15:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgoltsa (direktor A.V. Roslavtsev).
(PHOSPHORUS--ISOTOPES) (EYE--TUMORS)

Byvsheva, T.

20-6-32/42

AUTHOR: Byvsheva, T.

TITLE: Spore-Pollen Description of the Terrigenous Rock Complex of the Lower Carboniferous of the Buzuluk and Melekess Control Wells (Sporovo-pyl'tsevaya kharakteristika terrigennogo kompleksa porod nizhnego karbona Melekesskoy i Buzulukskoy opornykh skvazhin).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 6, pp. 1009-1011 (USSR).

ABSTRACT: Up to now there is no uniform opinion about the age of an immense terrigenous mass of the Lower-Carboniferous detected by a series of boreholes in the Kuybyshev-region, Tartaria and Udmurtia. For this purpose the author studied 145 samples from the Melekes gimlet-hole Nr 1 and separated 6 spore-pollen complexes. I. complex was stated in the interval 2018-1767, 1 m in bituminous lime-marl sediments of Famenian upper part and Tourné lower part. Pollen of Psorosphaers and Perisaccus is characteristic. In the Moscow basin the complex is missed. II. complex was followed in an argyllite packet; clays and marls (1767,1 - 1681 2 m). Especially it contains small spores without an seam of the groups of Leiotriletes, Acanthotriletes and Trachytriletes with a large vertical distribution. Spores with an edge - rare and scanty. III. complex of an argyllite packet (1681,2-1662,8 m) contains the same spores, some of which are distributed in the Tourné, others in the Visé.

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Spore-Pollen Description of the Terrigenous Rock Complex of the Lower Carboniferous of the Buzuluk and Melekess Control Wells

IV. complex of an aleurolith-argyllite-packet with coal intermediate layers (belongs to Visé, according to L. M. Yelina; 1662,8-1595 m) surprising with its abundance of species. The contents of species is connected with the complexes III and V. by various characteristics, but is distnguished by species existing only in this place. Generally speaking it is remarked by greater spores of the subgroups Euryzontriletes, Stenozonotriletes, Lophozonotriletes a. o., and by small quantities of Trematozonotriletes. The spores of the plants mentioned in the II. complex exist in considerably smaller quantities, than those ones in the II. and III. complex. Characteristic species are mentioned. Finally, the megaspores of Triletes fulgens, Tr. parviapiculatus and Lagenicula kidstoni (similar the spores of Carboniferous coal of Poland) were isolated. V. complex was separated in a sand-clay-packet with coal intermediate layers (1595-1961,o m). It is compared to the lower part of the Stalinogorsk horizon of the Moscow basin. Characteristic species are mentioned. VI. complex of a clay-packet (1504,5-1478,6 m) is distinguished by an abrupt modification of the spore-pollen-spectrum. Large long-seamed spores scracely exist. Many other species decrease. A similar spore-composition was mentioned from the Tula horizon of Krasnaya-Polyana (S. N. Naumova). 42 samples of the

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20-6-32/42

Spore-Pollen Description of the Terrigenous Rock Complex of the Lower Carboniferous of the Buzuluk and Melekess Supporting Bore-Holes.

Buzuluk bore-holes were analyzed. The lowest part of the Carboniferous (2840-2693,26 m) according to the brachiopodes and foraminifers were placed to the Upper-Kizelov layers. Spores and pollen are missed here. At 2732,2-2693,26 m) the complex corresponded to the II. of Melekess. At 2693,26-2686 m it is apparently analogous to the III. one. Consequently the author from both bore-holes obtained spore complexes which render possible a stratigrafic disposition of the masses and the confrontation of regions distant from each other.
There are 4 references, 3 of which are Slavic.

ASSOCIATION: **All-Union Scientific Research Institute for Petroleum and Geological Prospecting**
(Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut).

PRESENTED: June 14, 1957, by S. I. Mironov, Academician

SUBMITTED: June 14, 1957.

AVAILABLE: Library of Congress.

Card 3/3

SEMIKHATOVA, Sof'ya Viktorovna, prof.; YELINA, Lyubov' Mikhaylovna; RYZHOVA, Antonina Aleksandrovna; RYSHKOVA, Tamara Vladimirovna; DALMATSKAYA, Irina Ippolitovna; DOBROKHOTOVA, Sof'ya Vasil'yevna; MINYAYEVA, Yevgeniya Georgiyevna; ROSTOVTSEVA, Lidiya Fedorovna; ZARETSKAYA, A.I., ved.red.; POLOSINA, A.S., tekhn.red.

[Studies on Carboniferous sediments of the Volga-Ural oil-bearing province] Materialy k izucheniiu kamennougol'nykh otlozhenii Volgo-Ural'skoi neftenosnoi oblasti. Pod red. S.V.Semikhatovoi. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1959. 206 p. (MIRA 13:3)

(Volga Valley--Geology)
(Ural Mountains--Geology)

BYVSHEVA, T.V.

Some spore species from index complexes of the terrigenous layer of the Lower Carboniferous in the Volga-Ural region. Trudy VNIGNI no.37:37-58 '63. (MIRA 16:8)

BYVSHIKH, I.N.

Device for determining the height of poles. Avtom.telem.i sviaz' 3 no.12:31-33 D '59. (MIRA 13:4)

1. Starshiy inzhener otdela avtomatiki i svyazi instituta Sibtsvetmetniiproyekt.
(Electric lines--Poles)

BYVSHIKH, M.D.

Automatic dryer for crating and boxing stock. Der. prom. 6 no.10: 5-6 O '57. (MIRA 10:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny.
(Lumber--Drying) (Drying apparatus)

BYVSHIKH, M.D.

Effect of temperature and moisture content of wood on its elastic-plastic properties. Der.prom. 8 no.2:13-15 F '59. (MIRA 12:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki dereva.

(Wood--Testing)

BAMM, A.I.; BYVSHIKH, M.D.

Over-all mechanization of the production of small boards for packing containers on NTD machines. Der. prom. 8 no.9:3-6 S '59. (MIRA 12:12)

(Woodworking machinery) (Automatic control)

BYVSHIKH, M.D.

Automatic control of drying operations. Der.prom. 10 no.1:4-6 Ja '61. (MIRA 14:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki dereva.
(Lumber--Drying) (Automatic control)

BYVSHIKH, Mikhail Dmitriyevich; D'YAKONOV, Kuz'ma Filarentovich; DONNIKOVA, A.A., red.izd-va; SHIBKOVA, R.Ye., tekhn.red.

[Reference book for the foreman of a lumber kiln]Posobie masteru lesosushil'nogo tsekha. Moskva, Goslesbumizdat, 1962. 121 p. (MIRA 16:3)
(Lumber--Drying)

BYVSHIKH, Mikhail Dmitriyevich; D'YAKONOV, Kuz'ma Filaretovich; POTEKHIN, L.P., red.; MELEKHOVA, L.S., tekhn. red.

[Controlling, measuring, and regulating apparatus for chamber wood drying] Kontrol'no-izmeritel'nye i reguliruiushchie pribory kamernoi sushki drevesiny. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo, 1962. 89 p. (MIRA 16:7)

1. Laboratoriya sushki TSentral'nogo nauchno-issledovatel'skogo instituta mekhanicheskoy obrabotki drevesiny (for Byvshikh, D'yakonov).

(Lumber--Drying)

BYVSHIKH, M.D.; BAMM, A.I., red.

[Continuous line for the production of small planks for containers by the sawdustless sawing of wood] Potochnaia liniia proizvodstva tarnykh doshchechek bezopilochnym rezaniem. Moskva, TSentr. in-t tekhn. informatsii i ekon. issledovanii po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1963. 34 p. (MIRA 17:4)

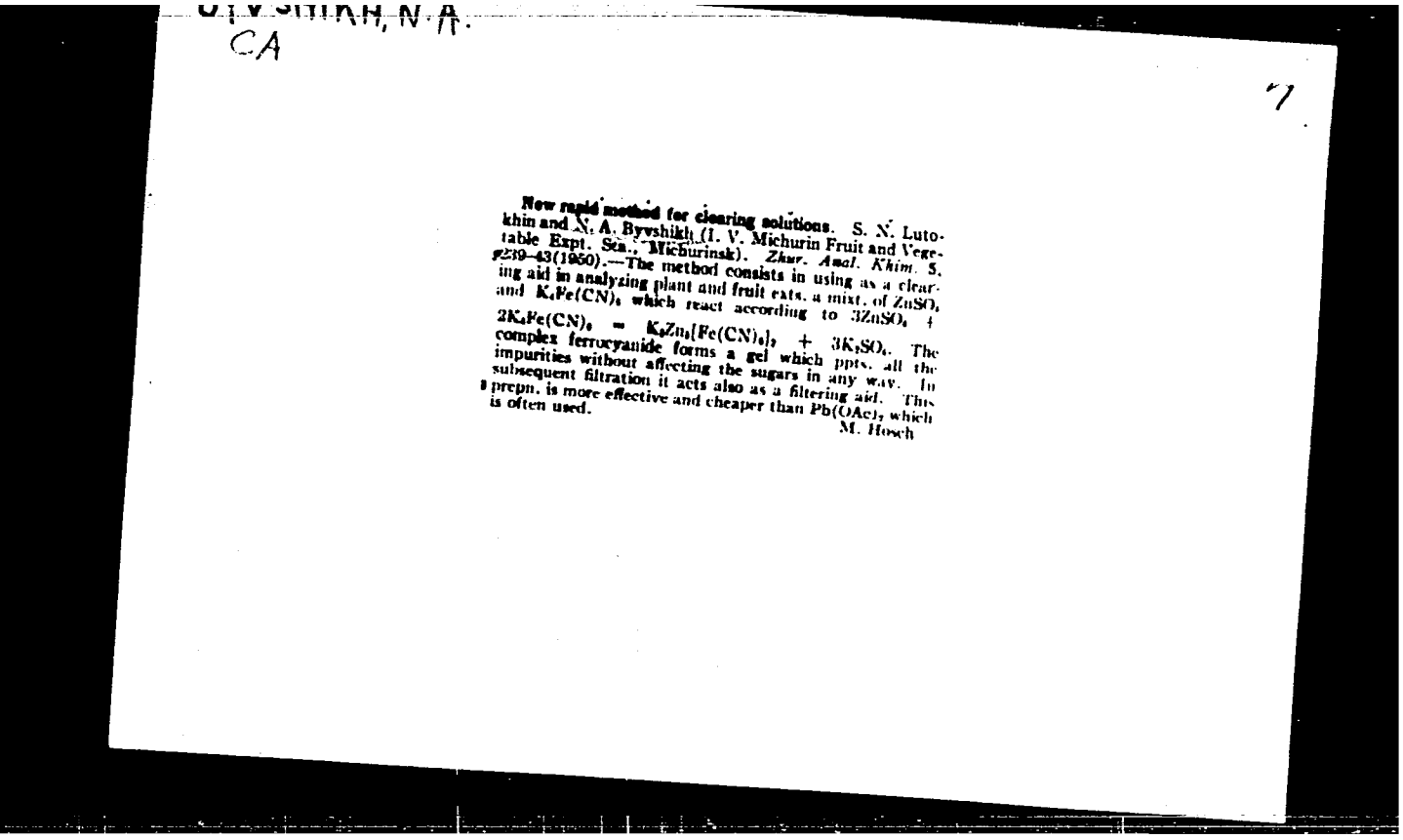
BYVSHIKH, M.D.

Studying the elastic and plastic characteristics of wood under various hydrothermal state. Nauch. trudy TSNIIMOD no.11:106-126 '61. (MIRA 17:9)

1. Zaveduyushchiy laboratoriyey sushki drevesiny TSentral'nogo nauchno-issledovatel'skogo instituta mekhanicheskoy obrabotki drevesiny.

BYVSHIKH, M.D.; D'YAKONOV, K.F.; NETREBENKO, L.A., red.

[Control, measuring, and regulating equipment for the kiln drying of lumber] Kontrol'no-izmeritel'nye i reguliruiushchie pribory dlia kamernoi sushki drevesiny. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl., i lesnomu khoz., 1963. 67 p. (MIRA 17:10)



LUTOKHIN, N.A.

CA

7

New rapid method for clearing solutions. S. N. Lutokhin and N. A. Byvshikh (I. V. Michurin Fruit and Vegetable Expt. Sta., Michurinsk). *Zhur. Anal. Khim.* 5, 239–43(1950).—The method consists in using as a clearing aid in analyzing plant and fruit exts. a mixt. of $ZnSO_4$ and $K_4Fe(CN)_6$ which react according to $3ZnSO_4 + 2K_4Fe(CN)_6 = K_2Zn_3[Fe(CN)_6]_2 + 3K_2SO_4$. The complex ferrocyanide forms a gel which ppts. all the impurities without affecting the sugars in any way. In subsequent filtration it acts also as a filtering aid. This prepn. is more effective and cheaper than $Pb(OAc)_2$ which is often used.

M. Hosch

2904 Byvshikh, N. A.

Biokhiicheskiye izmeneniya v sozrevayushikh semenakh arbuza i rol' ploda v posleuborochnom ikh dozrevanii. Michurinsk, 1954. 19 s. 20 sm. (M-vo vyssh. obrazovaniya SSSR. Plodoovoshney in-t im. I. V. Michurina). 100 ekz. B. Ts. - (54-55786)

BYVSHIKH, N.A.

USSR/Physiology of Plants. Respiration and Metabolism. I-3

Abs Jour: Ref. Zhur-Biologiya, No 1, 1958, 1154.

Author : Sokolov, A.M., Byvshikh, N.A.
Inst : Vegetable Institute imeni Michurin.
Title : On Some Biochemical Changes in Apple Leaves Damaged by Plant Lice.

Orig Pub: Tr. Plodoovoshchn. in-ta im. I.V. Michurina, 1956, 9, 91-100.

Abstract: No abstract.

Card : 1/1 -13-

USSR /Plant Physiology. Respiration and Metabolism. I

Abs Jour : Ref Zhur - Biol., No 9, 1958, No 38892

Author : Byvshikh, N. A.
Inst : Institute of Fruits and Vegetables imeni I. V. Michurin
Title : Change and Conversion of Nitrogenous Substances and Proteins in Ripening Watermelon Seeds.

Orig Pub : Tr. Plodoovoshchn. in-ta im. I.V. Michurina, 1956, 9, 225-244

Abstract : In fat-free meal (flour) from seeds removed from watermelon fruits during ripening, as also after preservation of the technically ripe fruits, in the course of a different period of time, there was determined the total N, protein N, N of peptones, bases and amidine. There was 88-97% N to a protein fraction. In ripening or subsequent ripening, in seeds; there was stored total and protein N, but the non-protein content of all components of the group decreased; in the course of over-exposure,

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USSR / Plant Physiology. Respiration and Metabolism.

Abs Jour : Ref Zhur - Biol., No 9, 1958, No 38892

Abstract : In case the seeds were kept in the fruits after attaining biological maturity, changes of the reverse order occurred. In proportion to the ripening of the seeds, there was an increase in the content of the preponderant globulin therein, at the expense of the protein and the glutelin. Glutelins were enriched with N only during the ripening phase, but proteins and globulins did so also during the process of maturing. Seeds of the late-ripening Melitopol'skiy 142 variety were distinguished from those of the early Stokes variety by a higher ratio of the protein fraction to the non-protein one, by a lower solubility and a higher N-content. Bibliography: 34 titles.

Card 2/2

BYVSHIKH, N.A.

Amino acid composition of globulins in ripening watermelon seeds. Fiziol.rast. 7 no.3:335-339 '60. (MIRA 13:6)

1. Plodoovoshchnoy institut imeni I.V. Michurina, Michurinsk.
(Globulins) (Seeds) (Melons)

BYVSHIKH, N.A.

Effect of mineral nutrition on the growth of vine crops and their uptake of nitrogen and phosphorus in the early stages of the development. Nauch. dokl. vys. shkoly; biol. nauki no.1:146-150 '64.
(MIRA 17:4)

1. Rekomendovana kafedroy khimii Michurinskogo plodoovoshchnogo instituta.

BYVSHUK, N.S. [Byvshuk, M.S.]

Pharmacology of noradrenaline; effect on blood pressure [with summary in English]. Fiziol.zhur. [Ukr.] 3 no.6:131-136 D '57. (MIRA 11:2)

1. Kiivs'kiy medichniy institut im. akad. O.O.Bogomol'tsya, kafedra farmakologii.

(ADRENALINE) (BLOOD PRESSURE)

USSR/Pharmacology and Toxicology. Adrenergics V-5

Abs Jour: Ref Zhur - Biol., No 10, 1958, No 47224

Author : Byvshuk N.S.
Inst : Crimean Medical Institute
Title : The Peculiarities of the Action of Noradrenaline Upon the Heart

Orig Pub : Tr. Krymsk. med. in-ta, 1957, 17, 160-164

Abstract : Experiments were carried out on the isolated, normal and hypodynamic hearts of frogs, rabbits and rats, as well as on a whole animal (rabbit heart in situ). The action of noradrenaline (N) on the isolated heart, particularly hypodynamic, manifests a gradual and prolonged increase of the amplitude of heart contractions without essential changes of rhythm and is accompanied by far lesser expense of glycogen in the heart muscle than under the influence of adrenalin (experiments on 80 rats). As to restoration of the normal amounts of glycogen in the myocardium, this

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Abs Jour : Ref Zhur - Biol., No 10, 1958, No 47224

follows more rapidly after introduction of N than after administration of adrenalin. Under conditions of an intact organism, N does not produce a stimulating effect upon the heart.

USSR/Pharmacology and Toxicology. Adrenergics V-6

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 47223

Author : Byvshuk N.S.
Inst : Crimean Medical Institute
Title : The Effect of Noradrenaline on the Smooth Musculature

Orig Pub : Tr. Krymsk. med. in-ta, 1957, 17, 165-170

Abstract : Experiments were carried out on isolated organs, namely: sections of the intestine of a rabbit according to Magnus' method and isolated lungs of guinea pigs, as well as on whole animals with experimentally induced bronchospasm. It was shown that noradrenaline (N) relaxes the tone of the smooth musculature of the intestine and depresses its rhythmic contractions, but that the force of the inhibitory action of N on the intestine is 10-30 times weaker than that of adrenalin (A). N relaxes the normal musculature of the bronchi, but its bronchodilatory action is 2 times weaker than that of A; N is also capable of lowering an increased

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Abs Jour : Ref Zhur - Biol., No 10, 1958, No 47223

tone of the bronchial musculature; its antispasmodic effect is somewhat lesser than that of A. -- From the author's summary.

BYVSHUK, N. S., CAND MED SCI, "EXPERIMENTAL ~~INVESTIGA-~~ studies ~~TIONS~~ ON THE PHARMACOLOGY OF NORADRENALIN." KIEV, 1958. (KIEV ORDER OF LABOR RED BANNER MED INST IM ACAD A. A. BOGOMOLETS). (KL, 3-61, 230).

BYVSHUK, N.S.

Comparative study of glycogen content changes in the liver and skeletal muscles under the influence of adrenaline and noradrenaline. Vop. med. khim. 9 no.4:411-414 Jl-Ag '63 (MIRA 17:4)

1. Kafedra farmakologii Ternopol'skogo gosudarstvennogo meditsinskogo instituta.

BYVSHUK, N.S.

Comparative study of the effect of adrenaline and noradrenaline on the motor and evacuatory function of the stomach. Farm. i toks. 26 no.6:678-684. N-D '63 (MIRA 18:2)

1. Kafedra farmakologii (zav. - doktor med. nauk N.P.Skakun) Ternopol'skogo meditsinskogo instituta.

BYVSHIKH, N.A.

Effect of mineral fertilizers on the physiological and biochemical changes in pumpkin seeds. Nauch. dokl. vys. shkoly; biol. nauki no.1:148-152 '66.
(MIRA 19:1)

1. Rekomendovana kafedroy khimii plodoovoshchnogo instituta im. I.V.Michurina. Submitted April 14, 1964.

BEZGUBOV, A.I.; BYVSHIKH, Yu.I.; DEMENT'YEV, P.K.; KISLAYKOV, Ya.M.; KOVALEV, L.V.[deceased]; KOTLYAR, V.N., prof.; KRUGLOVA, V.G.; RUDNITSKAYA, L.S.; TSYRUL'NIKOV, V.M.; VARZANOVA, A.N., red.; VLASOVA, N.A., tekhn. red.

[Uranium in ancient conglomerates] Uran v drevnikh konglomeratakh. Moskva, Gosatomizdat, 1963. 187 p. (MIRA 16:4)
(Uranium) (Conglomerate)

MASHAROVA, N.V., inzh.; BYVALYY, E.I., inzh.; TARASEVICH, L.I., inzh.; KISLOV, A.K., tekhnik

Investigating the performance of the fanless heating unit designed by engineers V.A. and B.V.Shushpannikov. Sbor. KuzNIUI no.10:202-221 '64. (MIRA 18:9)

BYVSHUK, N.S.

Effect of noradrenaline on the bile secretion function of the liver. Farm. i toks. 28 no.1:96-99 Ja-F '65.
(MIRA 18:12)

1. Kafedra farmakologii (zav. - prof. N.P.Skakun) Ternopol'skogo meditsinskogo instituta. Submitted December 25, 1963.

ARONSON, V.Ye.; BALASHOV, Ye.T.; BERMAN, S.A.; BYZER, B.I.; KALININ, N.A.; MAKHONIN, A.K.; IMASHEV, N.U.; TOKAREV, V.P.

Plans for commercial prospecting for the Zhetybay and Uzen' deposits. Trudy VNIGRI no.218:62-73 '63. (MIRA 17:3)

BYSZEWSKI, Waclaw, mgr inz.

Modern one-story cold stores. Przegl techn 85 no.4:7,8 26 Ja '64.

BYSZEWSKI, Waclaw, mgr inz.

Role of refrigerating engineering in technological progress. Pt. 3.
Przegl techn 85 no.17:7 26 Ap '64.

KAMENEV, Nikolay Nikolayevich, inzh.; BYZEYEVA, L.A. [translator]; MERLIS, V.M. [translator]; SHTIVEL'MAN, N.M. [translator]; SAZONOV, A.G., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

[Converting steam locomotive depots into depots for diesel locomotives; translated articles] Pereustroistvo parovoznykh depo v teplovoznye; sbornik perevodnykh statei. Sost. N.N. Kamenev. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 174 p. (MIRA 14:4)

(Railroads--Roundhouses)

A.C.S. BYZGO, V.S.

Geology

Alum extraction from Aktash alunites by the neucid method. I. K. Delimarskii and V. S. Byzgo. *Zhur. Prikład. Khim.*, 18 [6] 342–52 (1945).—The process of producing potassium alum from Aktash alunite ore is described. In addition to the chemical characteristics of the raw material, the processes of roasting the alunite ore, leaching out the roasted material, and crystallizing the alum were investigated. It has been established that the evolution of bound water begins at 430° and the evolution of SO_3 at 630°. The roasting process was studied both in the laboratory and in a factory furnace. The optimum conditions for roasting are as follows: temperature 650°, time 16 hr., and diameter of chunks of ore 200 to 250 mm. Leaching out of the roasted ore is completed in 16 hr. when cold and in 3 hr. when heated. If the ore is not leached, it is better to keep the temperature below 80° to avoid hydrolysis. The specific gravity of the solutions after crystallization should be about 1.2. The overyield of alum from 1 ton of ore is 325 kg.

YAROSHENKO, M.F.; BIZGU, S.Ye.

Accumulation and physicochemical characteristics of bottom sediments in Dubossary Reservoir. Trudy Inst.biol.Mold.fil. AN SSSR 2 no.1:3-18 '60. (MIRA 16:4)
(DUBOSSARY RESERVOIR—SEDIMENTATION AND DEPOSITION)

BYZGU, S.Ye., mlad. nauchn. sotr.; DYMCHISHINA-KRIVENTSOVA, T.D., mlad. nauchn. sotr.; NABEREZHNYY, A.I., kand. biol. nauk; TOMNATIK, Ye.N., kand. biol. nauk; SHALAR', V.M., mlad. nauchn. sotr.; YAROSHENKO, M.F., doktor biol. nauk;

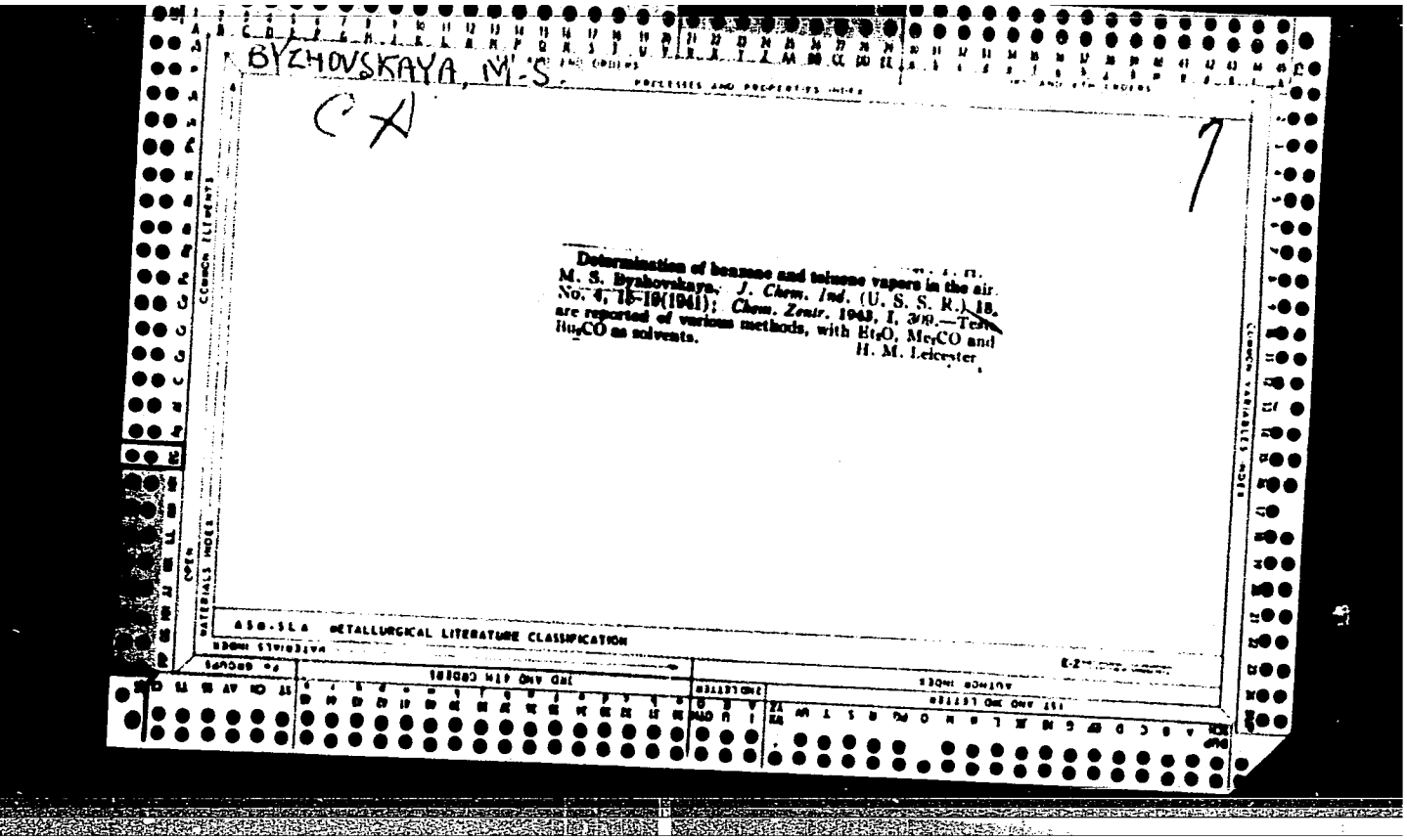
[Dubossary Reservoir; development and piscicultural significance] Dubossarskoe vodokhranilishche; stanovlenie i rybokhoziaistvennoe znachenie. [By] S.E.Byzgu i dr. Moskva, Nauka, 1964. 228 p. (MIRA 18:3)

1. Chlen-korrespondent Akademii nauk Moldavskoy SSR (for Yaroshenko).

GORBATEN'KIY, G.G.; BYZGU, S.Yo.

Hydrochemical characteristics of small reservoirs of Moldavia.
Biol. res. vod. Mold. no.2:24-59 '64.

(MIRA 18:10)



BYZOV, A.L.; SMIRNOV, G.D.

Physiological analysis of blood pressure variations in anemia of the central nervous system. Fiziol. zh. SSSR 37 no.5:621-631 Sept-Oct 51. (CIML 21:4)

1. Laboratory of General and Comparative Physiology, Institute of Animal Morphology imeni A.N. Severtsov of the Academy of Sciences USSR, Moscow.

BYZOV, A. L., SMIRNOV, G. D. and RAMPAN, Yu. I.

"Action of Thiol Poisons on Synaptic Transmission of Impulses in Sympathetic Ganglia," Dokl. AN SSSR, 87, No.1, pp 155-158, 1952

Inst. of Animal Morphology im. A.N.Severtsov, AS USSR

Translation W-27579, 27 Aug 53

USSR/Medicine - Physiology

BYZOV, A L.

FD-1328

Card 1/2 : Pub. 33-6/25

Author : Smirnov, G. D., Byzov, A. L., and Rampan, Yu. I.

Title : Role of tissue sulfhydryl groups and acetylcholine secretion in transmission of excitation in the upper carvical sympathetic ganglia of a cat.

Periodical : Fiziol. zhur. 4, 424-430, Jul/Aug 1954

Abstract : Significance of tissue sulfhydryl groups is indicated in the process of synaptic transmission of excitation in mammals. This again confirms the significance of acetylcholine metabolism in transmission of excitation in the synpathetic ganglia. Results of experiments on cats reveal that interruption in acetylcholine secretion usually takes place after cadmium chloride is injected. This in turn blocks transmission of excitation in the upper cervical sympathetic ganglia. Action on preganglionic part of synapse, within which acetylcholine synthesis takes place, is produced mainly by ions of cadmium. Ezerine briefly renews restorative conductivity after it is injected under conditions of cadmium block. Restoration of acetylcholine secretion takes place during excitation after cysteine is injected, resulting in restoration of nerve impulse transmission across synapse. Diagrams. Nine Soviet and three non-Soviet references.

Card 2/2

FD-1328

Institution : Laboratory of General and Comparative Physiology, Institute of Animal Morphology imeni A. N. Svertsov, Academy of Sciences USSR, Moscow

Submitted : October 15, 1952

KOSHTOYANTS, Kh.S.; BYZOV, A.L.

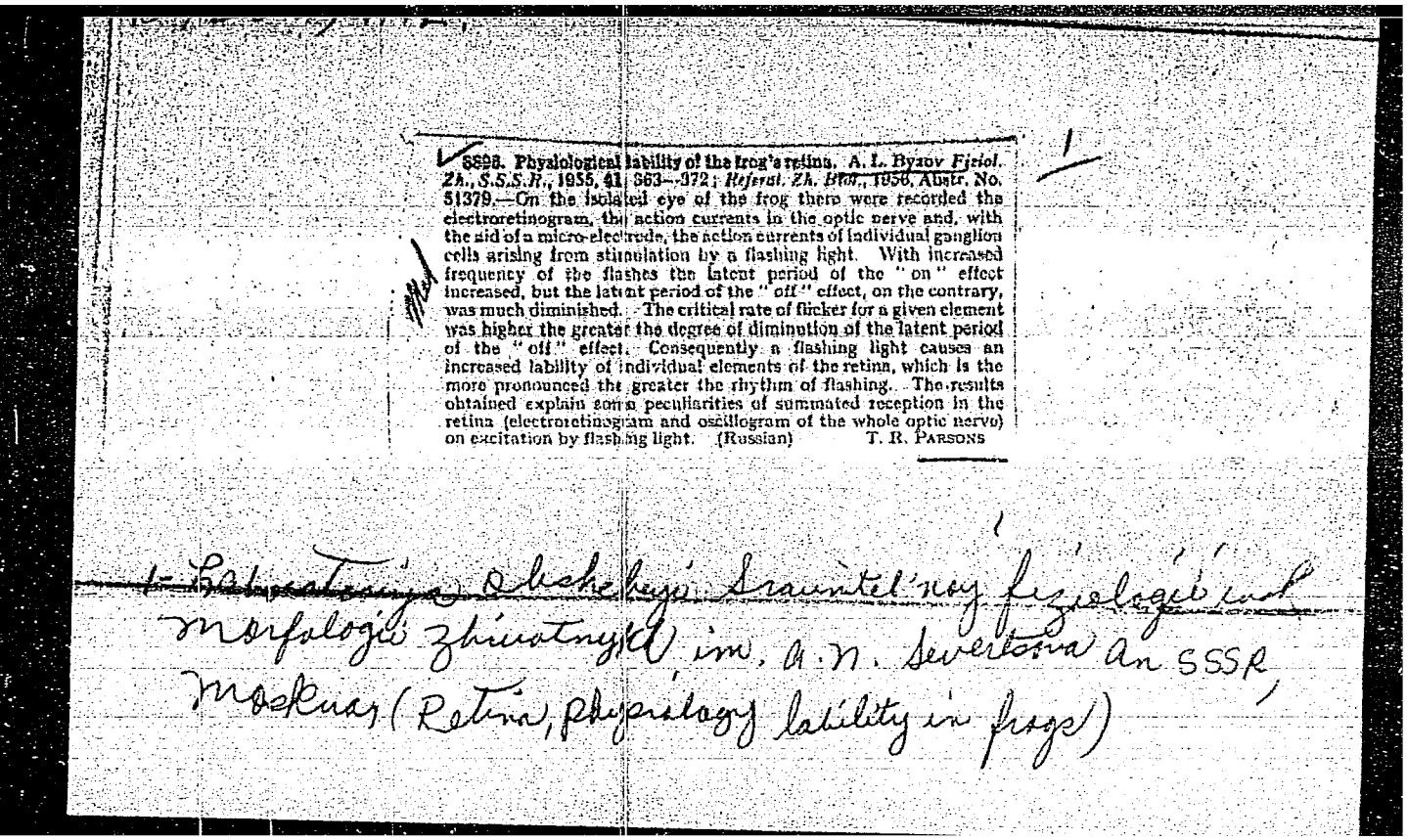
Oscillographic investigation of the central nervous system of the mulberry solkworm in various stages of development. Zool.zhur. 33 no.4:807-814 Jl-Ag '54. (MLRA 7:8)

1. Laboratoriya obshchey i sravnitel'noy fiziologii Instituta morfologii zhivotnykh im. A.N.Severtsova Akademii nauk SSSR.
(Silkworms) (Nervous system--Insects)

BYZOV, A.L.

Effect of changes in flickering light intensities on the dynamics of lability of the separate functional elements of the retina in frogs. Dokl. AN SSSR 105 no.4:852-855 D '55. (MLRA 9:3)

1. Institut morfologii zhivotnykh imeni A.N. Severtsova Akademii nauk SSSR. Predstavleno akademikom L.A. Orbeli.
(RETINA)



6898. Physiological lability of the frog's retina. A. L. Byzov *Fiziol. Zh., S.S.S.R.*, 1955, 41, 363—372; *Referat. Zh. Biol.*, 1956, Abstr. No. 51379.—On the isolated eye of the frog there were recorded the electroretinogram, the action currents in the optic nerve and, with the aid of a micro-electrode, the action currents of individual ganglion cells arising from stimulation by a flashing light. With increased frequency of the flashes the latent period of the "on" effect increased, but the latent period of the "off" effect, on the contrary, was much diminished. The critical rate of flicker for a given element was higher the greater the degree of diminution of the latent period of the "off" effect. Consequently a flashing light causes an increased lability of individual elements of the retina, which is the more pronounced the greater the rhythm of flashing. The results obtained explain some peculiarities of summated reception in the retina (electroretinogram and oscillogram of the whole optic nerve) on excitation by flashing light. (Russian) T. R. PARSONS

1- Laboratoriya Obshchey Granitel'noy Fiziologii i Morfologii Zhivotnykh im. A. N. Severtsova An SSSR Moskva (Retina, Physiology lability in frogs)

BYZOV, A. L.

BYZOV, A. L.: "The dynamics of the lability of the retina and its functional elements." Acad Sci USSR. Inst of Animal Morphology imeni A. N. Severtsov. Moscow, 1956. (Dissertation for the Degree of Candidate in Biological Sciences).

SO: Knizhnaya Letopis', No 23, 1956

Byzov A. L.

EXCERPTA MEDICA Sec.12 Vol.11/7 Ophthalmology July 57

1094. BYZOV A. L. Lab. of Compar. Physiol., Inst. of Animal Morphol., AN, SSSR, Moscow. *Lability of single retinal units in some mammals (Russian text) FIZIOL. Z. 1956, 42/12 (1011-1020) Graphs 1 Illus. 4

Reactions of single retinal cells to flickering light were recorded in cats, guinea-pigs, and rabbits by means of microelectrodes (20μ diameter), with variation of the flicker frequency at constant flash duration. Exposure to flickering light increased the latent period of the on-effect and decreased that of the off-effect as compared to the response to single flashes of the same duration. These changes were greater with higher flicker frequencies. Increase of brightness produces a brief increase of the critical frequency (CFF) of the on-effect, and decrease of brightness produces a brief increase of the CFF of the off-effects. Some retina units, however, have a constant rate of discharge which is not significantly affected by variation of the frequency or intensity of light flashes.

Simonson - Minneapolis, Minn. (II, 12)

T

Country : USSR
Category: Human and Animal Physiology. Sense Organs. Vision.

Abs Jour: RZhBiol., No 19, 1958, 89333

Author : Byzov, A L
Inst : -
Title : On the Method of the Microelectrode Leads of the Action Potentials of Isolated Ganglia Cells of the Retina.

Orig Pub: Biofizika, 1957, 2, No 2, 252-258

Abstract: Microelectrodes (M) for leads of action potentials of single ganglia cells of the retina must satisfy the following characteristics: their internal diameter being ~ 20 μ, the resistance must be ~ kohm, the isolating glass layer must

Card : 1/2

Country : USSR
Category: Human and Animal Physiology. Sense Organs. Vision.

Abs Jour: RZhBiol., No 19, 1958, 89333

have a thickness of 30-50 μ and an even transverse section. The technique of manufacture of M is described. Examples of action potentials of ganglia cells of the retinas of a frog, cat and guinea pig, obtained with the aid of the M, are given. The potentials of ganglia cells of the retina of a frog were different from the potentials of ganglia cells of retinas of mammals. -- F. Ye. Fridman

Card : 2/2

BYZOV, A.L.

Resistance and capacity of various retinal layers in the frog [with summary in English]. Biofizika 3 no.6:658-670 '58. (MIRA 12:1)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(RETINA, physiol.
resist. & capacity of various layers of frog retina (Rus))

BYZOV, A.L.

Physiological lability of the retina and its elements. Probl. fiziol.opt. 12:358-366 '58 (MIRA 11:6)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR. (RETINA)

BYZOV, A.L.; UTINA, I.A.

Motion of the nuclei of retinal rods in the frog and site of origin of the electroretinogram [with summary in English]. Biofizika 4 no.2:187-197 '59. (MIRA 12:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(RETINA, physiol.
lability of rod nuclei & site of origin of electroretinogram in frogs (Rus))

BYZOV, A.L.

Source of impulses recorded in the inner retinal layers of the frog. Biofizika 4 no. 4:414-422 '59. (MIRA 14:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ELECTROPHYSIOLOGY) (RETINA)

BYZOV, A.L.

Analysis of potential and current distribution in the retina during stimulation by light. Report No. 1: Activity of two types of bipolar cells. Biofizika 4 no. 6:689-701 '59. (MIRA 14:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ELECTROETINOGRAPHY)

BYZOV, A.L.; BONGARD, M.M.

Cathode follower for experiments with microelectrodes. Fiziol.zhur. 45 no.1:110-114 Ja '59. (MIRA 12:2)

1. From the Insitute of Biophysics, U.S.S.R. Academy of Sciences, Moscow.

(ELECTROPHYSIOLOGY, appar. & instruments,
cathode repeater for micro-electrodes (Rus))

BYZOV, A.L.

Analysis of potential and current distribution in the retina during stimulation by light. Report No.2: Passive distribution of potentials and currents in the retina as a volume conductor. Biofizika 5 no.3: 284-292 '60. (MIRA 13:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ELECTRORETINOGRAPHY)

S/194/62/000/001/027/066
D201/D305

AUTHORS: Byzov, A. L. and Chernyshev, V. I.

TITLE: An automatic machine for producing microelectrodes

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 1, 1962, abstract 1-2-101 y (Biofizika, 1961, 6, no. 4, 485-489)

TEXT: The special features of micro-electrodes, the arrangement and operation of the automatic machine are described. The process of filling the electrodes and experimental checking of micro-electrodes are explained. It is shown that the resistance of electrodes filled with ЗМКС1 (ZMKS1) as measured in the Ringer solution is normally 30 - 50 / Abstracter's note: The units are illegible, possibly megohms / and in certain cases reaches 200 - 300. Testing of micro-electrodes was carried out in 2 series of experiments: in experiments using muscle fibers of crustacea and of frogs (with electrodes having long and thin necks) and in experiments using intracellular drawing off of the reaction (diam. <10 microns) of

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the retina cells with a resistance of 50 - 200. A description of the electric circuits of the automatic machine is given. 3 figures. 11 references. [Abstracter's note: Complete translation.]

BYZOV, A.L.

Nature of the R[redacted] in the retina of the frog. Biofizika 6 no.5:620-623 '61. (MIRA 15:3)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ELECTRORETINOGRAPHY)
(RETINA)

BYZOV, A.L.

Components of the electroretinogram of a turtle. Fiziol. zhur. 47 no.1:71-79 Ja '61. (MIRA 14:3)

1. From the Biophysical Institute, Academy of Sciences U.S.S.R., Leningrad.
(ELECTRORETINOGRAPHY) (TURTLES)

CRLOV, O.Yu.; BYZOV, A.L.

Colorimetric investigation of vision in cephalopod mollusks. (MIRA 14:7)
Dokl. AN SSSR 139 no.3:723-725 Jl '61.

1. Institut biologicheskoy fiziki AN SSSR. Predstavleno akademikom Yu.A. Orlovym.
(Cephalopoda) (Color sense)

BYZOV, A.L.

PHASE I BOOK EXPLOITATION SOV/6205

Makarchenko, A. F., Resp. Ed.

Osnovnyye voprosy elektrofiziologii tsentral'noy nervnoy sistemy (Basic Problems in the Electrophysiology of the Central Nervous System) Kiyev, Izd-vo AN UkrSSR, 1962. 231 p. Errata slip inserted. 1600 copies printed.

Sponsoring Agency: Vsesoyuznoye fiziologicheskoye obshchestvo im. I. P. Pavlova. Institut fiziologii im. A. A. Bogomol'tsa Akademii nauk USSR.

Eds.: A. F. Makarchenko, Resp. Ed.; D. S. Vorontsov, P. G. Kostyuk, F. N. Serkov; Resp. Secretary: I. P. Semenyutin; Tech. Ed.: Yu. M. Bokhno.

PURPOSE: This book is intended for physiologists who are interested in recent advances in electrophysiology.

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Basic Problems in the (Cont.) SOV/6205

COVERAGE: The present book is a collection of articles presented at the Symposium on Electrophysiology held in Kiyev on 1-2 July 1961. The articles in the collection are grouped into the following sections: 1) Electrophysiology of neurons (sensory, motor, and relay neurons of the spinal cord, and neurons of the retina); 2) Induced electrical potentials of the cerebral cortex; and 3) Background rhythms of the cerebral cortex. References are given following the individual chapters. No personalities are mentioned.

TABLE OF CONTENTS:

Card 2/2

ORLOV, O.Yu.; BYZOV, A.L.

Functioning of the eye in the spider (Aranea). Biofizika, 7 no.1: 70-72 '62. (MIRA 15:5)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(EYE) (SPIDERS) (ELECTRORETINOGRAPHY)

BYZOV, A.L.; ORLOV, O.Yu.; UTINA, I.A.

Adaptation study of the eye of cephalopod mollusks. Biofizika 7 no.3:318-327 '62. (MIRA 15:8)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(VISION)

TRIFONOV, Yu.A.; BYZOV, A.L.

Action of a constant current on the electroretinogram of the frog.
Biofizika 7 no.4:426-432 '62. (MIRA 15:11)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ELECTRORETINOGRAPHY)

BYZOV, A.L.; ORLOV, D.Yu.

Sources of the electroretinogram in Cephalopoda. Fiziol. zhur. 48 no.1:16-23 Ja '62. (MIRA 15:2)

1. From the Institute of Biophysics, Moscw.
(CEPHALOPODA) (ELECTRORETINOGRAPHY)

ORLOV, O.Yu.; BYZOV, A.L.

Vision of cephalopoda. Priroda 51 no.3:115-118 Mr '62.
(MIRA 15:3)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(Cephalopoda)

BYZOV, A.L.; MAZOKHIN-PORSHNYAKOV, G.A.

Analysis of insect electroretinograms. Biofizika 8 no.4:487-497 '63. (MIRA 17:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

RYAZOV, A.L.

Origin and certain properties of the P_{III} component in the electroretinogram of a frog. Fiziol. zhur. 49 no.4:440-448 Ap '63. (MIRA 17:4)

1. From the Institute of Biophysics, U.S.S.R. Academy of Sciences, Moscow.

ACCESSION NR: AP4022483 S/0217/64/009/002/0217/0225

AUTHOR: By*zov, A. L.; Flerova, G. I.

TITLE: Electrophysiological investigation of frog olfactory epithelium

SOURCE: Biofizika, v. 9, no. 2, 1964, 217-225

TOPIC TAGS: olfactory epithelium, R. temporaria frog, epithelium biopotential, olfactory stimulus, epithelium cell receptor, chloroform, acetone, ethyl ether, inhibited reaction, off-effect, potential oscillation difference, classification of smell

ABSTRACT: Microelectrodes implanted in the olfactory epithelium of decapitated R. temporaria frogs were used to determine the nature of electric reactions to various aromatic stimuli. Stimulation was produced by holding a syringe filled with an aromatic substance 0.5 cm from the epithelium by passing pressurized air through a vessel containing an aromatic substance, or by blowing the aromatic substance on the epithelium. Potentials were amplified and then picked up by a ENO-1 cathode oscillograph and the picture was photographed from the screen. Findings indicate that potential oscillations in the

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ACCESSION NR: AP4022483

olfactory epithelium are produced by the cell receptors and not by the olfactory hairs. Chloroform, acetone, and ethyl ether vapors inhibit the reactions produced by aromatic oils, methylbenzoate, and others. Cessation of chloroform, acetone, and ehtyl ether vapor stimuli is accompanied by an off-effect. The form of potential oscillations differs for the various olfactory stimuli when applied for a prolonged period (2 to 5 sec). Potential oscillation differences are more easily identified when the stimulus is repeated for a short period. Using the degree of inhibition reaction to a repeated stimulus as a criterion, the 20 smells in this study can be classified into 5 groups. Perception of smell differences appears to be more poorly developed in frogs than in higher animals and man. Orig. art. has: 4 figures.

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moscow (Institute of Biological Physics AN SSSR); Institut biologii vodokhranilisch, AN SSSR, Borok (Institute of Reservoir Biology, AN SSSR)

SUBMITTED: 05Nov62 DATE ACQ: 13Apr64 ENCL: 00

SUB CODE: LS NR REF SOV: 006 OTHER: 025

Card 2/2

MAKSIMOV, V.V.; ZENKIN, G.M.; BYZOV, A.L.

Study of the functional properties of the two types of bipolars in the frog retina. Biofizika 10 no.1:141-147 '65.
(MIRA 18:5)

1. Institut problem peredachi informatsii AN SSSR, Moskva.

TRIFONOV, Yu.A.; BYZOV, A.L.

Reaction of cells, the sources of S-potentials of the turtle retina, to the current conducted through the eye goblet. Biofizika 10 no.4:673-680 '65. (MIRA 18:8)

1. Institut problem peredachi informatsii AN SSSR, Ochakovo.

MAZOKHIN-PORSHNYAKOV, Georgiy Aleksandrovich; BYZOV, A.L., otv. red.; IOFFE, V.G., red.

[Vision in insects] Zrenie nasekomykh. Moskva, Nauka, 1965. 262 p. (MIRA 18:11)

UTINA, I.A.; BYZOV, A.L.

Study of functional properties of the photoreceptors of the frog retina by cytochemical method. Biofizika 10 no.6: 1088-1091 '65. (MIRA 19:1)

1. Institut problem peredachi informatsii AN SSSR, Moskva.
Submitted May 5, 1965.

DOLGOPOL'SKIY, I.I.; DOHROMIL'SKAYA, I.M.; BYZOV, B.A.

Hydrofluorination of vinylacetylene with a suspended catalyst.
Zhur.prikl.khim. 31 no.11:1716-1722 N '58. (MIRA 12:2)
(Hydrofluoric acid) (Butenyne) (Fluoroprene)

SOV/80-59-1-31/44

AUTHORS: Dolgopol'skiy, I.M., Dobromil'skaya, I.M. and Byzov, B.A.

TITLE: Chemical Transformations of Mercury Salts and Their Role in the Hydrofluorination Reaction of Vinylacetylene (Khimicheskiye prevrashcheniya soley rtuti i ikh rol' v reaktsii gidroftorirovaniya vinilatsetilena) Third Communication (Soobshcheniye III)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Nr 1, pp 194-201 (USSR)

ABSTRACT: The authors investigated the composition of the catalytic mixture; the character of its changes in the hydrofluorination process of vinylacetylene; the mechanism of this reaction, and the formation of resins taking place during this process. The effect of various factors and conditions of experiments on the run of this process was also investigated and the results are presented in the tabular and graphical forms. The main results are as follows: 1. the change in the content of mercury and its salts at the continuous operation of the catalyzer is shown; 2. the possibility of a considerable lengthening of continuous operation with the maintenance of the constant activity of the catalytic mixture is demonstrated, which is attained by means of the periodic renewal of the catalyzer composition; 3. the possible mechanism of the hydrofluorination reaction and of the several side reactions occurring during

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SOV/80-59-1-31/44

Chemical Transformations of Mercury Salts and Their Role in the Hydrofluorination Reaction of Vinylacetylene

the synthesis of fluoprene out of vinylacetylene is considered. There are 3 graphs, 6 tables and 4 references, 3 of which are Soviet and 1 American.

ASSOCIATION: October 4, 1957

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BYZOV, L.A.

[Graphic methods in planning, statistics and calculation] Graficheskie metody v planirovanii statistike i uchete. 2.izd. Moskva, Gos.statisticheskoe izd-vo, 1952. 180 p. (MLRA 6:9)
(Graphic methods)

BYZOV, L.A. ✍

N/5
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Graphische Methoden in der Planung, Statistik und Erfassung. Berlin, Die Wirtschaft, 1955.

227p. diagrs., maps, tables.

Translation from the Russian: Graficheskiye metody v planirovanii statistike i uchete. 2. ed., Moscow, 1952.

BYZOV, L. N.

PHASE I BOOK EXPLOITATION SOV/5401

Boshnyak, Leonid Leonidovich, and Lev Nikolayevich Byzov

Izmereniye malykh raskhodov zhidkostey (Measuring Low Liquid Flows) Moscow, Mashgiz, 1961. 77 p. Errata slip inserted. 7,000 copies printed.

Reviewer: P. P. Kremlevskiy, Candidate of Technical Sciences; Ed.: I. G. Megrin, Engineer; Ed. of Publishing House: A. G. Fomichev; Tech. Ed.: A. A. Bardina; Managing Ed. for Literature on the Design and Operation of Machines (Leningrad Division, Mashgiz): F. I. Fetisov.

PURPOSE: This booklet is intended for engineering technical workers concerned with the design and operation of flowmeters and automatic control devices in various branches of industry.

COVERAGE: The booklet discusses methods of measuring small flows of liquids (1-100 cm^3/sec). The theoretical and experimental characteristics

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of various flowmeters are compared. Fundamentals of theory, as well as design and operation problems of turbine flowmeters are discussed. P. P. Kremlevskiy, A. N. Makarov, M. Yu. Sherman, A. N. Pavlovskiy, N. I. Toperverkh, and D. I. Ageykin are mentioned as working in this field. There are 21 references: 9 Soviet, 11 English, and 1 French.

TABLE OF CONTENTS:

AC/dwm/bc
8-17-61

Card 4/4

BOSHNYAK, L.L.; BYZOV, L.N.; KAZNACHEYEV, E.A.

Experimental determination of the time constant of vane-tachometer converters of flowmeters. Izm.tekh. no.2:58-60 F '62. (MIRA 15:2)

(Flowmeters—Testing)

39745
S/115/62/000/007/007/008
E194/E455

26.2191

AUTHORS: Boshnyak, L.L., Byzov, L.N., Kaznacheyev, B.A., Luk'yanov, G.A.

TITLE: The calibration of turbine-tachometer flow meters

PERIODICAL: Izmeritel'naya tekhnika, no.7, 1962, 45-49

TEXT: Despite the simplicity of turbine-tachometer flow meters, equations for the motion for the indicator rotor remain approximate, mainly because the external load on the rotor is small and so peculiarities of rotor design or flow structure become decisive. Accordingly, generalized calibration curves are plotted experimentally on the basis of the theory of similarity. Previous work on this theory has introduced unnecessary complications on the one hand and has omitted important matters on the other. The initial and boundary conditions for the steady-state process are considered. The two simplest dimensionless criteria of similarity are

$$\pi_1 = \frac{nd^3}{Q} \quad \text{and} \quad Re = \frac{\rho Q}{\mu d} \qquad (1)$$

where n - rotor speed; d - effective diameter; Q - flow rate;

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The calibration of ...

ρ - density; μ - viscosity. A relationship between Re and π_1 is inconvenient to use and so Re is replaced by its analogue which is obtained by multiplying Re by π_1

$$\pi_2 = \frac{\rho\, nd^2}{\mu} = \frac{nd^2}{\nu} \qquad (2)$$

The calibration curve is then obtained in the form of π_1 as function of π_2. For high flow-rates in particular, the boundary conditions must be extended because, for example, eddy-current losses in leads are proportional to the square of rotor speed. Accordingly, the following criterion is introduced

$$\pi_3' = \frac{k}{\rho Q d^2} \qquad (4)$$

In this equation k is a coefficient of proportionality, constant for a given design of tachometer, which depends on the magnetic field intensity, the dimensions of the current-carrying parts and the properties of their materials. It can be determined experimentally and then when working on liquids of